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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/800,887	03/08/2001	Seiji Sano	201066US2	6821
22850	7590	11/12/2003	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			RUTHKOSKY, MARK	
			ART UNIT	PAPER NUMBER
			1745	7
DATE MAILED: 11/12/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

MR

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/800,887	SANO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Mark Ruthkosky	1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 1-7, 13-22 and 24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-12 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/8/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>7</u> . | 6) <input type="checkbox"/> Other:  |

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## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

The information disclosure statement filed 3/8/2001 has been placed in the application file, and the information referred to therein has been considered as to the merits.

The examiner also requests the disclosure of any prior art documents or search reports related to the European Patent Application 01105662.9, which is publication EP 1132986 A2. The document is in the same patent family as the instant application and corresponding priority document. The EPO document was printed without a search report and no search report was made available to the examiner.

### ***Drawings***

The drawings filed on 3/8/2001 have been approved.

### ***Election/Restrictions***

Applicant's election with traverse of claims 8-12 and 23 in Paper No. 6 is acknowledged. The traversal is on the ground(s) that the claims do not present an undue burden if examined together. This is not found persuasive because the inventions have been shown to be distinct as

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provided in the restriction. For example, the applicant has not shown that Inventions I and IV, related as a product and process of use, are not distinct by proving that the product cannot be used in a materially different process. The requirement is still deemed proper and is therefore made FINAL.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8-12 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 8 states that a claimed element of the fuel cell system is an operation control means for controlling an operating state of the fuel cell such that a water control ratio equivalent to the relative humidity is within a predetermined range. The water control ratio is not defined by the claim to be a ratio with regard to a first or second value. Thus, it is not clear as to what forms the claimed ratio (such as a numerator or denominator of the ratio.) For example, a ratio will have three values: the numerator and denominator of the ratio and the resulting equivalent ratio value. Two of the three variables must be shown in order to calculate the third. The claims will be examined as best understood due with respect to this rejection.

*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 8-12 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsukui et al. (JP 362176064.)

The instant claims are to a polymer electrolyte fuel cell system comprising a relative humidity detection means for detecting a relative humidity of an exhaust gas of a fuel cell and an operation control means for controlling an operating state of the fuel cell such that a water control ratio equivalent to the relative humidity is within a predetermined range.

Tsukui et al. (JP 362176064) teaches a polymer electrolyte fuel cell system comprising a relative humidity detection means in the exhaust gas of a fuel cell. A signal from a sensor is transmitted to an operation control means for controlling an operating state of the fuel cell. The supply amount of the oxidizing gas is controlled according to the humidity of the exhaust gas. A water control ratio of the oxidizing gas is therefore equivalent to the relative humidity as they are directly related. The relative humidity is always in the range of 70-95%, which is within a predetermined range. The flow rate is noted as a control variable that is equivalent to the supply

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amount. As the variables of the ratio are indefinite, it is taken that the flow supply amount and the relative humidity will provide the proper relationship to give a value of one. Thus, the claims are anticipated.

***Examiner Correspondence***

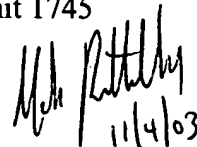
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1193. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Ruthkosky whose telephone number is 703-305-0587. The examiner can normally be reached on FLEX schedule (generally, Monday-Thursday from 9:00-6:00.) If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached at 703-308-2383.

The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Mark Ruthkosky

Primary Patent Examiner

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11/4/03